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CASE REPORT

Chest pain after emotional and physical upset

A 61 year old white woman attended her local accident and emergency department with severe central chest pain after being chased by two large terrier dogs. The pain was not relieved by nitroglycerine spray given in the ambulance. An electrocardiogram showed anterolateral ST segment depression, with an elevated troponin T of 1.25 µg/l. She had no cardiovascular risk factors. Non-ST elevation myocardial infarction was diagnosed, and the patient was treated accordingly.

Coronary angiography showed normal coronary arteries, but the left ventriculogram showed a large area of apical hypokinesis with moderate impairment of left ventricular systolic function.

The patient was readmitted several weeks later with further chest pain. An electrocardiogram showed no new changes with no rise in the cardiac troponin. An echocardiogram showed that her left ventricular systolic function had almost returned to normal.

1. What is the diagnosis?
2. Which patients are most at risk?
3. How should these patients be treated?
4. What are the characteristic findings?

Submitted by P Parulekar, M Z O Khawaja, E T McWilliams

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STATISTICAL QUESTION

Continuous variables

How would you best begin to explore the distribution of a continuous variable?

- a) Scatter plot
- b) Box plot
- c) Histogram
- d) Hypothesis test

Submitted by John Fletcher

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PICTURE QUIZ

Imaging after trauma to the neck

A patient was brought by ambulance to the emergency department several hours after falling down a flight of steps. She was delivered on a spinal board with her neck immobilised in a collar, blocks, and tape. She complained of severe neck pain but was otherwise alert and orientated. Her score on the Glasgow coma scale was 15. No abnormal neurological findings were present on examination and the rest of the examination was unremarkable. Given the history of a high risk mechanism and severe neck pain, screening cervical radiographs were obtained.

1. What are the standard views in a cervical spine trauma series?
2. What lines are used to evaluate a lateral cervical spine radiograph?
3. What abnormalities do these radiographs show?
4. What is the clinical significance of this injury?
5. What further imaging does this patient need?

Submitted by Bernard Wee, John H Reynolds, Anthony Bleetman

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PRIZE QUIZ: Wound healing

Each week we offer a prize of a *BMJ* memory stick to the person who answers correctly, in the quickest time, a set of examination questions taken from OnExamination.

To enter the quiz, go to www.onexamination.com/endgames. The competition closes at midnight on Wednesday, and the winner will be announced in the print *BMJ*.

Answers to this question can be viewed at

www.onexamination.com/Endgames/LastEndgame.aspx.

Here's one question from this week's quiz on wound healing from the MRCS part A:

A 72 year old woman presents with a long standing leg ulcer.

Which one of the following minerals is most important in wound healing?

- Copper
- Magnesium
- Potassium
- Selenium
- Zinc